

## United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,314	12/07/2001	Amit Baruch	P-3782-US	7924
24505 75	590 07/17/2006		EXAMINER	
DANIEL J SWIRSKY 55 REUVEN ST.			ALBERTALLI, BRIAN LOUIS	
BEIT SHEMES			ART UNIT	PAPER NUMBER
ISRAEL			2626	
			DATE MAILED: 07/17/2004	6

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Comments	10/005,314	BARUCH ET AL.				
Office Action Summary	Examiner	Art Unit				
	Brian L. Albertalli	2626				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 31 Ma	av 2006					
<u>'</u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>20-32</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>20-32</u> is/are rejected.						
7) Claim(s) is/are objected to.						
Application Papers	·					
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
The bath of declaration is objected to by the Examiner. Note the attached Office Action of form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some col None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa					

## Response to Arguments

1. Applicant's arguments filed May 31, 2006 have been fully considered but they are not persuasive.

The Applicant's argued that a combination of Stammler et al. and Brown et al. would crate a device which, for each feature, would require the many different engines of Brown et al. (see page 5 of Applicant's arguments). Multiple speech recognition engines in a combination of Stammler et al. and Brown et al. would therefore not each be "specific" to one non-dialing feature, as argued by the Applicant (see page 6 of Applicant's arguments).

However, this argument is not persuasive for several reasons. The Applicant's arguments suggest that a speech recognition engine that is "specific" to a non-dialing feature of a device is a speech recognition engine with is <u>exclusive</u> to that feature. That is, to follow the Applicant's presented example, a calendar feature would activate only the calendar speech recognition engine.

However, this position is not supported by either the specification or the claims themselves. The claims recite activating "at least one" non-dialing feature specific recognition engines to operate the non-dialing feature of the device using the recognition results from the at least one feature-specific speech recognition engine.

Therefore, more than one "non dialing feature specific" engines may be activated in response to a user requesting a single non-dialing feature of the device. Furthermore, the specification goes on at length as to the advantages of feeding audio input to more

than one separate recognition engine (see, for example, paragraph 33 and paragraph 39 of the specification).

Page 3

Therefore, in light of the specification, a speech recognition engine that is "specific to one non-dialing feature of the device" is not a speech recognition engine that is exclusive to that particular feature and is the only recognition engine used in recognizing commands for that particular function, but rather, is a speech recognition engine that is *most suited for* or *particularly fitted for* that feature.

Similarly, Brown et al. teaches using multiple speech recognition engines that are each assigned to recognize a particular type of spoken utterance increases the accuracy of recognition results and allows recognition to proceed more quickly and with less disruption to the user (column 6, lines 29-36). Therefore, one of ordinary skill in the art at the time of invention would be motivated to include a separate recognition engine for each non-dialing feature available in the system disclosed by Stammler et al. Although such a system may utilize multiple recognition engines for a particular feature, each recognition engine would be "specific to a non-dialing feature of the device" in that each engine would be determined to provide the highest reliability for recognizing a particular type of utterance associated with a non-dialing feature (see column 3, lines 44-49 of Brown et al.).

Regarding the use of Official Notice in the rejection of claims 25 and 32, the Applicant admits that it is well known in the art to include a variety of non-dialing features into a single device (see page 6 of Applicant's arguments). Therefore, the well Application/Control Number: 10/005,314 Page 4

Art Unit: 2626

known in the art statement is taken to be admitted prior art. Furthermore, with regard to the argument that "it didn't occur to anyone... to make speech recognition engines specific to those non-dialing features", as explained above, the incorporation of a separate speech recognition engine for each available feature of a device would have been obvious to one of ordinary skill in the art at the time of invention, in view of Stammler et al. and Brown et al. Further, while Stammler et al. and Brown et al. do not teach the specific features of claims 25 and 32 (selected from the group of MESSAGES, CALENDAR, TO DO, MEMO, FAX, and EMAIL), it is well known in the art to include these features in a device. Therefore, a combination of Stammler et al., Brown et al. and the Applicant's admitted prior art would include a separate speech recognition engine for each of the specific features listed in claims 25 and 32.

2. Therefore, for the reasons given above, the previous rejections are maintained.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 20-24, 26, 28, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stammler et al. (U.S. Patent 6,839,670), in view of Brown et al. (U.S. Patent 6,377,922).

Art Unit: 2626

In regard to claims 20 and 28, Stammler et al. disclose a device (Fig. 2) and cellular telephone (a car phone is necessarily a cellular telephone, column 12, lines 38-40) comprising:

a feature command speech recognition unit to perform recognition of a user command requesting a non-dialing feature of said device (speaker independent recognizer recognizes the user's request of a function, including non-dialing functions such as station frequency, column 12, lines 41-43 and 48-53 and column 13, lines 22-34);

at least two speech recognition engines, one of which is specific to one non-dialing feature of the device to perform recognition on a voice input (when the user selects the "name selection" function, a switch to the speaker-dependent recognizer is made to recognize the name, including names or functions associated with non-dialing features, column 12, lines 41-43 and 48-53, column 13, lines 47-51); and

a control unit to activate at least one of said at least two non-dialing feature specific speech recognition engines in accordance with the output of said non-dialing feature command speech recognition unit (the "name selection" function switches control to the speaker-dependent recognizer, column 13, lines 47-51) and to operate said non-dialing feature of said device using recognition results from said selected non-dialing feature-specific speech recognition engine whenever user input is required (the speaker-dependent recognizer is used to recognize the input of a name and the results are used to perform a function associated with that name, column 12, lines 41-43 and lines 50-53; column 13, lines 52-67 and Fig. 9).

Furthermore, as explained in the Response to Arguments section above,

Stammler et al. specifically teach recognizing at least two different non-dialing features,
including multiword commands (column 12, lines 45-47) and names or function words
which are associated with non-dialing functions (such as a station frequency of a radio
station list or a target location for navigation systems, column 12, lines 41-43 and 4853). Additionally Stammler et al. teach recognizing functions, while related to telephone
activities, that are not dialing features (such as storing numbers/names, column 14,
lines 25-39)

Stammler et al. do not disclose that each and every function that is available to the device is associated with a separate speech recognition engine that is specific to that function (speaker-independent recognizer is used to recognize the user's request of a function, as well as number dialing, see column 14, lines 2-6 and Fig. 10).

Brown et al. disclose a plurality of speech recognition engines (Fig. 1, 105-107) and disclose that different speech recognition engines have different capabilities and provide varying degrees of reliability under different circumstances (column 3, lines 25-31). Further, Brown et al. disclose that using multiple speech recognition engines that are each assigned to recognize a particular type of spoken utterance increases the accuracy of recognition results and allows recognition to proceed more quickly and with less disruption to the user (column 6, lines 29-36).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Stammler et al. to include a separate speech recognition engine for each available non-dialing function in the device, in order to increase the accuracy of

Art Unit: 2626

recognition results and allow recognition to proceed more quickly and with less disruption to the user, as taught by Brown et al. (column 6, lines 29-36).

In regard to claim 21, Stammler et al. disclose the device is a telephone (column 12, lines 38-40), computer (workstation, column 12, lines 40-44), a car accessory (the telephone is a car phone, an the device can be used as a car navigation device, column 12, lines 38-44), an audio device (a telephone is an "audio device"), and a voice controlled appliance (any device with speech recognition capabilities is a "voice controlled appliance").

In regard to claim 22, Stammler et al. disclose the telephone is a portable telephone and a cellular telephone (a car telephone is necessarily portable and must necessarily be a cellular telephone, column 12, lines 38-40).

In regard to claims 23 and 31, Stammler et al. disclose a loader to load and unload said speech recognition devices independently of each other (the loading of the speaker dependent speech recognizer depends only on the function selected by the user, and not the loading of the speaker independent speech recognizer, column 13, lines 47-51 and Fig. 9).

In regard to claim 24, Stammler et al. disclose the feature commands are a function of the type of device which said device is (for example, if the device is a

telephone the dialing of a telephone number would be a function, and for a radio, the selection of a station frequency would be a function column 12, lines 48-53).

In regard to claims 26 and 30, Stammler et al. do not disclose a feature is associated with at least two speech recognition engines and said control unit activates said at least two speech recognition engines in parallel.

Brown et al. disclose recognizing a command with two speech recognition engines in parallel (column 5, lines 54-67).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Stammler et al. to recognize associate a feature with at least two recognition engines and activate at least two recognition engines in parallel, in order to allow speech recognition to proceed more quickly and accurately, with less disruption to the user, as taught by Brown et al. (column 6, lines 29-36).

5. Claims 25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stammler et al., in view of Brown et al., and further in view of Applicant's Admitted prior art (see Response to Arguments section above).

In regard to claims 25 and 32, Stammler et al. disclose any functions may be included as feature commands (column 13, lines 34-36).

Stammler et al. and Brown et al. do not explicitly disclose that the additional functions are selected from the group consisting of MESSAGES, CALENDAR, TO DO, MEMO, FAX, and EMAIL.

Page 9

Applicant's Admitted prior art discloses it is notoriously well known in the art to incorporate non-dialing features (such as a calendar) into a device such as a portable telephone, so that a separate device is not needed for each specific function (i.e. a separate calendar device, fax device, etc.).

It would have been obvious to one of ordinary skill in the art at the time of invention to further modify the combination of Stammler et al. and Brown et al. to include feature specific speech recognition engines for feature commands selected from the group consisting of MESSAGES, CALENDAR, TO DO, MEMO, FAX, and EMAIL, so that a separate device would not be needed for each function. Additionally, using multiple speech recognition engines that are each assigned to recognize a particular type of spoken utterance (such as a specific feature command) increases the accuracy of recognition results and allows recognition to proceed more quickly and with less disruption to the user.

## Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Application/Control Number: 10/005,314 Page 10

Art Unit: 2626

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L. Albertalli whose telephone number is (571) 272-7616. The examiner can normally be reached on Mon - Fri, 8:00 AM - 5:30 PM, every second Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BLA 7/12/06

DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2000